

STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene

201 W. Preston Street, Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – John M. Colmers, Secretary

Office of Preparedness & Response

Isaac P. Ajit, M.D., M.P.H., Deputy Director

March 21, 2008

Public Health & Emergency Preparedness Bulletin: # 2008:11 Reporting for the week ending 03/15/08 (MMWR Week #11)

CURRENT HOMELAND SECURITY THREAT LEVELS

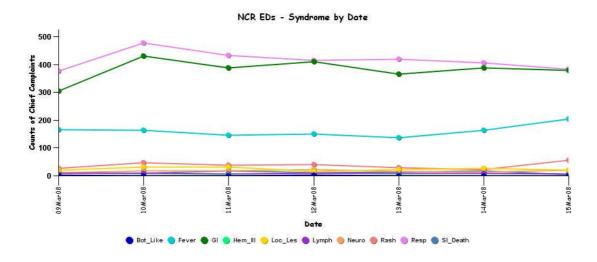
National: Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)

Maryland: Yellow (ELEVATED)

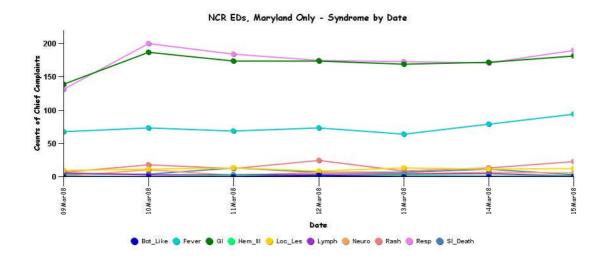
SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts only. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

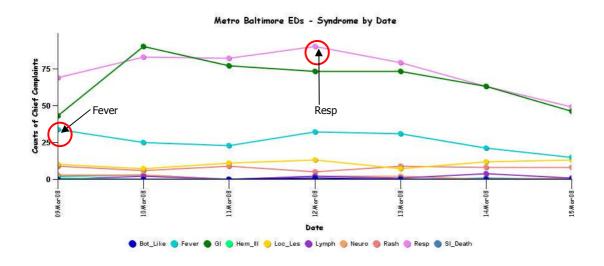
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.



^{*} Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system



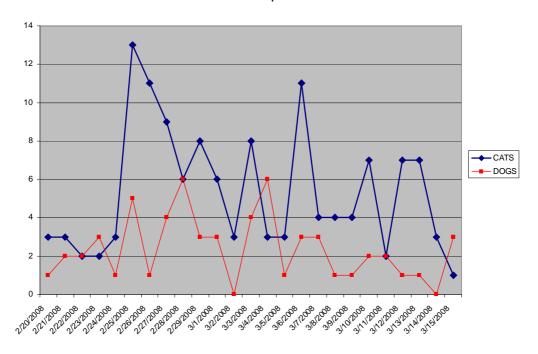
^{*} Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system



^{*} Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

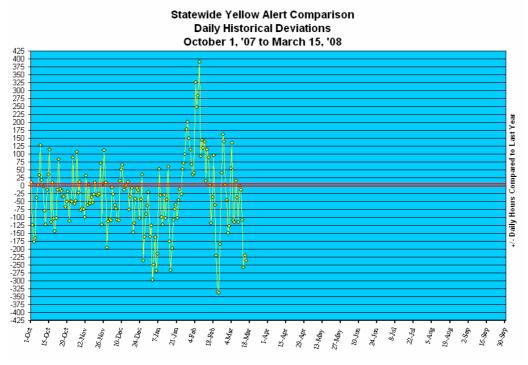
BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT: No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data

Dead Animal Pick-Up Calls to 311



REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/06.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to BT for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in February 2008 did not identify any cases of possible terrorism events.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	<u>Aseptic</u>	<u>Meningococcal</u>
New cases (Mar 9 – 15, 2008):	3	0
Prior week (Mar 2 – 8, 2008):	14	2
Week#10, 2007 (Mar 10 - 16, 2007):	10	2

OUTBREAKS: 3 outbreaks were reported to DHMH during MMWR Week 11 (Mar. 9-Mar. 15, 2008):

1 Gastroenteritis outbreak

1 outbreak of GASTROENTERITIS associated with an Assisted Living Facility

2 Respiratory illness outbreaks

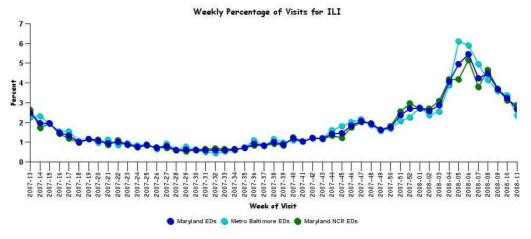
- 1 outbreak of RESPIRATORY ILLNESS associated with an Assisted Living Facility
- 1 outbreak of RESPIRATORY ILLNESS associated with a Nursing Home

MARYLAND SEASONAL FLU STATUS:

Seasonal Influenza reporting occurs October through May. To date this season, there have been 3363 lab confirmed influenza cases in Maryland. Maryland's influenza activity level for this week is REGIONAL.

SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS:

Graph shows the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. This graph does not represent confirmed influenza.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO Pandemic Influenza Phase: Phase 3/4: No or very little human-to-human transmission/Small clusters with limited human-to-human transmission, suggesting that the virus is not well adapted to humans

US Pandemic Influenza Stage: Stage 0/1: New domestic animal outbreak in at-risk country/Suspected human outbreak overseas

*More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at: http://bioterrorism.dhmh.state.md.us/flu.htm

WHO update: As of March 11, 2008, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 372, of which 235 have been fatal. Thus, the case fatality rate for human H5N1 is about 63%.

AVIAN INFLUENZA (India): 9 Mar 2008, Fresh cases of bird flu were confirmed in a middle West Bengal district on Mar 8, almost a month after roughly 4 million birds were culled to combat India's worst ever outbreak of the deadly avian influenza. "We have received confirmation of the deadly H5N1 strain in 2 villages of Murshidabad district. The 2 villages are Nayamukundapur in Raghunathgunj Block II and Dohapara village in Murshidabad-Jiagunj block," Murshidabad district magistrate Subir Bhadra said. The 2 areas, where about 900 poultry birds died in the past week, are about 300 km from Kolkata. Bhadra said the samples that were recently sent to the National Animal Research Laboratory in Bhopal from the 2 villages had tested positive. He said about 60 rapid response teams would start culling chickens and ducks in the affected areas soonest. In Kolkata, West Bengal Animal Resource Development (ARD) Minister Anisur Rahman said he had heard about the fresh outbreak and that culling would start on Mar 9. Early February 2008, it was hoped that the worst bird flu crisis ever was over after the completion of culling. The ban on sale and consumption of poultry products and meat was also lifted from 13 of the 19 West Bengal districts where the flu raged. The West Bengal government in early February 2008 had allayed fears of human infection in the avian flu-hit state, after all the 19 people in the state whose blood samples were sent to central laboratories had tested negative.

AVIAN INFLUENZA (Bangladesh): 9 Mar 2008, Bird flu has spread to another district in Bangladesh despite massive culling by authorities to control the outbreak, officials said on Mar 9, bringing the number of affected districts to 47 out of 64. The new case of the avian influenza was found in Brahmanbaria, in the east of the capital Dhaka, livestock officials said. They added that the spread of bird flu had slowed in the previously affected areas in recent weeks. Nearly 1.25 million birds have been culled since the virus was first detected in March 2007, threatening the impoverished country's growing poultry sector. No human bird flu cases have been reported in Bangladesh, a densely populated nation where poultry is commonly kept by households.

AVIAN INFLUENZA (Laos): 10 Mar 2008, The Luang Namtha provincial governor has announced a total ban on the sale of poultry in the province, as well as prohibiting the purchase of poultry from neighboring countries for the next 30-45 days, following 4 separate outbreaks of bird flu. "If the provincial authorities do not detect the H5N1 virus during this period they will lift the ban," the deputy head of the provincial Livestock and Fisheries Office, Ms Bouathong Inthongsay, said last week. She said that each section of the provincial Committee for Bird Flu Control had allocated staff to monitor the situation and take extra precautions in outbreak areas. They would set up checkpoints between villages to make sure there was no trade or movement of poultry either within the province or with other provinces. The governor also announced the setting up of checkpoints on international borders, to maintain strict control, said Ms Bouathong. Luang Namtha's highest risk district is considered to be Viengphoukha, as this surrounds the only road leading from the outbreak areas to the provincial capital and other provinces, she said. The committee has organized staff to disinfect all vehicles using this road. The provincial Public Health Department is distributing information to local communities about the bird flu virus, such as how it is transmitted, the risks it poses, and how people can prevent it spreading. No humans have yet to contract the virus because most local residents understand the dangers and have cooperated with the authorities, said a departmental official, Mr Aae Mithda. He said that 2 people had reported flu-like symptoms in Namlue village, the site of the 4th outbreak. They were undergoing tests but the results were not yet known.

AVIAN INFLUENZA, CIVET (Viet Nam): 12 Mar 2008, Five Owston's palm civets, which are named in the Red Book of Viet Nam, are reported dead because of bird flu in the Cuc Phuong National Park. From Feb 2 to Mar 2, 5 Owston's palm civets, 2 common palm civets, 5 peewit hoopie birds, 2 langurs, and one loris have died. Independent tests performed by the HCM (Ho Chi Minh) City Tropical Hospital and the Central Veterinary Diagnosis Centre show that the 5 Owston's palm civets died because of H5N1 virus, said Nguyen Van Cam, director of the Central Veterinary Diagnosis Centre. The park's animal preservation area currently has 8 Owston's palm civets and a black civet. Cam said wild birds and mice could enter the cages of these civets and transmitted H5N1 virus to them. The sources of food for civet are worms, fresh beef, and poultry meat bought from outside which could also bear virus. To protect the remaining civets and other species of animals in the park, the Central Veterinary Diagnosis Centre will conduct bird-flu tests on the 8 civets. The park management board has tightened control of disease in the park and carried out some measures to protect animals. In June-July 2005, at least 3 Owston's palm civets in the Cuc Phuong national park were reported dead because of H5N1. At that time, the case was considered mysterious because the dead civets lived in the same cage with 20 other healthy civets. Moreover, they ate pork, worms, and fruits, not chicken. Owston's palm civet is a civet that lives in the forests and wooded lowland river basins of northern Viet Nam, northern Laos, and southern China.

AVIAN INFLUENZA, HUMAN (Egypt): 13 Mar 2008, The Ministry of Health and Population of Egypt has announced a new human case of avian influenza A (H5N1) virus infection. The case is an 8 year old boy from Etsa District, Fayum Governorate. He was admitted to hospital with symptoms on Mar 3. He is receiving treatment and is in a stable condition. Investigations into the source of his infection indicate a history of contact with sick and dead poultry. Of the 47 cases confirmed to date in Egypt, 20 have been fatal.

NATIONAL DISEASE REPORTS:

HANTAVIRUS (Colorado): 10 Mar 2008, Testing coordinated by the Colorado Department of Health and Environment has confirmed that a Kiowa County man who died in late February 2008 had contracted a hantavirus, the viral cause of a serious respiratory disease carried by deer mice. The virus is carried in their saliva, urine, and droppings. Infection occurs when the virus becomes airborne and is inhaled, or by direct contact with rodents, their droppings, or nests. There are no known cases of the illness being passed from person to person. "In an area where deer mice are common, and with spring approaching, we need to be aware of areas where hantaviruses may be present," said Renay Crain, Kiowa County Public Health Nurse. "A few steps will help reduce the risk of contracting this illness. Preventing infection is key," she concluded. Hantavirus infection can be avoided by getting rid of mice in and around the home, storage buildings, and other structures. (Emerging Infectious Diseases are listed in Category C on the CDC list of Critical Biological Agents) *Non-suspect case

HANTAVIRUS (Louisiana or Colorado): 12 Mar 2008, The young man who has been battling the Blackwater Creek hantavirus is making more and more progress every day. He has been taken off the ventilator and dialysis. He is off all pain medication and antibiotics. He is sitting up watching television and is very alert. His family says by all accounts he is on the road to recovery. He may require some physical therapy due to 3 weeks of inactivity, but is otherwise looking forward to returning home. When he got back from a Mardi Gras Feb 5 skiing trip to Breckenridge, Colorado with 3 of his closest friends, "He thought he had the flu, then all of a sudden, it just snow-balled on him. He had to be medivaced to the hospital in Houston," his friend Alex Radford said. It wasn't the flu. He has been diagnosed with Blackwater Creek hantavirus. "Originally we thought it came from Colorado, from the mouse-droppings in our condo, but now, the doctors changed their minds and say he probably got it in a duck blind, a cover device for hunters, here in Louisiana," said Radford, who along with the other 2 boys who went to Colorado, have had diagnostic blood work done just in case. (Emerging Infectious Diseases are listed in Category C on the CDC list of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS:

CHOLERA (Somalia): 11 Mar 2008, Dr Abdinur Farah Mohamud alias Dr Karey, the head of Beled-Hawa district in Gedo region, has announced that the district is affected by cholera. The district, which is next to Mandera town in Kenya, has been overwhelmed by heat wave and high humidity, accelerating the clinical effects of the bacterial infection, according to Dr Karey. The highly infectious disease has hit the area hard and so far 24 people have died. Many others have been admitted to medical centers, especially the district hospital. Dr Karey said that the district authorities have been alerted by escalating public complaints of diarrheic illnesses. "Stool samples taken from patients to Kenya have proven the prevalence of cholera causing bacteria," said Dr Karey. The medical office warned that unless the right steps are taken, the district and surrounding areas would be devastated. According to a medical team, the inhabitants of the district and the thousands who migrated to the area for safety have been affected not only by cholera but also by other milder illnesses but with harmful effects. (Water Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

NIPAH VIRUS, FATAL (Bangladesh): 11 Mar 2008, Two children died, reportedly of Nipah virus infection, in Faridpur Medical College Hospital on Mar 6 and 7. Sources in the civil surgeon's office and the Faridpur Medical College said a 6-year-old girl from Udaypur in Rajbari died Friday morning, and a 16-year-old boy from Goalanda in Rajbari died on Thursday, both in Faridpur Medical College Hospital. Physicians at the hospital said samples were sent to hospital in Dhaka for viscera reports to establish the cause of the death. The United News of Bangladesh reports that the Rajbari civil surgeon, Bazlul Haque, after talking with the physicians at Faridpur Medical College Hospital said the 16-year-old boy might have suffered from Nipah virus infection. Local authorities, meanwhile, began a campaign on Mar 8 to make people aware of Nipah virus infection. (Emerging Infectious Diseases are listed in Category C on the CDC list of Critical Biological Agents) *Non-suspect case

ANTHRAX (Argentina): 12 Mar 2008, An anthrax outbreak was detected in Navarro, Buenos Aires Province in Argentina. 9 animals suddenly died within a 300 head herd of 2 year old steers; none showed blood from natural openings. 2 animals showed blood in spleen, mesenterium, and lymph nodes at necropsy. The big vessels showed uncoagulated blood. The animals had not been vaccinated and the farm did not have a history of anthrax. The outbreak occurred after a long dry period followed by rain. During necropsy the veterinarian recalled being stung by mosquitoes and 48 h after started showing clinical signs of skin anthrax in his left arm, generalized edema, and enlarged axilar lymph

node. He was treated with ciprofloxacin. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

CHOLERA (Zimbabwe): 13 Mar 2008, A cholera outbreak suspected to be affecting mostly fishmongers along the Zambezi River and Kariba has hit parts of the Sanyati Gorge and Hurungwe in Mashonaland West Province. However, health officials said intervention and assessment of the full extent of the outbreak was being hampered by the areas' inaccessibility because of the bad state of the roads. The affected areas include Mudzimu, Mafanzou, Mutambirwa, and the Gache Gache area. Mashonaland West provincial medical director Dr Wenceslaus Nyamayaro confirmed the outbreak adding that efforts were underway to get to the affected areas and render assistance. "There is an outbreak but current efforts to get to the affected areas are being hampered by the terrain in the area because our personnel have to go down the gorge to get to the affected people especially in the Sanyati Gorge," he said. Dr Nyamayaro urged people traveling to affected areas to practice hygiene and to ensure they consumed heated food and drank boiled water. (Water Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

CHOLERA (Uganda): 13 March 2008, So far, 6 people have died of cholera in Arua district. According to the district director for health services, Dr Patrick Anguzu, 280 cases had been recorded between Jan 1 and Mar 9. On Mar 8 and 9 alone, over 30 patients were admitted at Oli, the main treatment center. Anguzu said the majority of the patients were from Oli, Tanganyika, Adalafu, and Kenya wards. The crowded slums lack water and sanitation facilities, he added. The disease, which was reported in January 2008, Anguzu added, had been also reported in Offaka, Okollo, Ajia, and Pajulu sub-counties. Anguzu commended the Medecins Sans Frontieres for providing tents to create more room at the isolation ward and the United Nations Children's fund and the health ministry for availing the drugs. Anguzu added that although the cholera outbreak could be blamed on poor sanitation, it was also exacerbated by the inconsistent water supply by the National Water and Sewerage Corporation (NWSC). A water shortage hit Arua town in January 2008 when supply was cut off due to mechanical and power problems. Officials at NWSC blamed the power shortage on the West Nile Rural Electrification Company, which reduced supply from 18 hours to only 5 a day. David Ocema, the NWSC plant overseer, said there was insufficient electricity to run the purifying plant. (Water Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

CHIKUNGUNYA (Sri Lanka): 14 Mar 2008, The people of Deraniyagala have been warned about the spread of chikungunya in the area. About 150 are suspected to have contracted this disease, said Dr AN Palinda Karunatilleke, district medical officer, Eratne Rural Hospital. Dr Karunatilleke has informed the public health inspector to create awareness among the public about this disease. The spread of this fever is attributed to the unsanitary conditions in certain estate line rooms. (Emerging Infectious Diseases are listed in Category C on the CDC list of Critical Biological Agents) *Non-suspect case

CHOLERA (Namibia): 14 March 2008, Nine more suspected cholera cases have been reported in the north, bringing to 137 the number of infected people in a week. Under-secretary in the Ministry of Health and Social Services, Dr Norbert Foster, on Mar 13 said that the number of suspected cholera cases increased from 128 on Mar 12 to 137 in one day. Since the disease broke out Mar 8, 2 deaths have been recorded. Of the reported cases, 8 have been confirmed as cholera and 14 patients are admitted at Engela State Hospital. Foster says the rise in the number of suspected cholera cases is expected given the water situation in the North. The ministry together with stakeholders is, however, trying to bring the situation under control by intensifying community awareness on cholera. Water purification sachets have been distributed to communities but according to Forster, not every community might have been reached yet. While water purification remains key to preventing the spread of the disease, Foster says boiling water might not be easy especially among communities in villages that heavily depend on firewood for energy. (Water Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST:

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://bioterrorism.dhmh.state.md.us/

Flu prompts 2-week school closure in Hong Kong

This report describes the current seasonal flu outbreak occurring in Hong Kong. On March 12, it was announced that all primary schools, special schools and kindergartens in the city will close for 2 weeks, due to seasonal flu outbreaks. (http://www.cidrap.umn.edu/cidrap/content/influenza/general/news/mar1308hongkong.html)

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

Heather N. Brown, MPH Epidemiologist Office of Preparedness and Response Maryland Department of Health & Mental Hygiene 201 W. Preston Street, 3rd Floor Baltimore, MD 21201 Office: 410-767-6745

Fax: 410-333-5000

Email: HBrown@dhmh.state.md.us